Calendar No. 830

98TH CONGRESS
2d Session

SENATE

REPORT
98–423

NATIONAL BUREAU OF STANDARDS AUTHORIZATION

MAY 2 (legislative day, APRIL 30), 1984.—Ordered to be printed

Mr. PACKWOOD, from the Committee on Commerce, Science, and Transportation, submitted the following

REPORT

[To accompany S. 2458]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 2458) to authorize appropriations to the Secretary of Commerce for the programs of the National Bureau of Standards for fiscal year 1985, and for other purposes, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

PURPOSE OF THE BILL

The purpose of the bill as reported is to authorize appropriations to the Secretary of Commerce for the programs of the National Bureau of Standards (NBS), including certain special statutory programs, and to assist NBS in carrying out its responsibilities under the NBS Organic Act of 1901. The bill as reported authorizes appropriations of $131,600,000 for fiscal year 1985 for the NBS, and $3,371,000 for fiscal year 1985 for the Office of Productivity, Technology, and Innovation.

BACKGROUND AND NEEDS

NBS, the Nation's oldest national laboratory, was established by Congress in 1901. The NBS Organic Act of 1901 (Public Law 56–177), as amended in 1950, sets forth the primary NBS mission, which is to develop national standards of measurement for use in scientific research, engineering, manufacturing and commerce. These standards provide the basis for the exchange of goods, accurate specification and compatibility of products, and quality control methods for production. NBS is authorized to: (1) develop, maintain, and disseminate standards of physical and chemical measurements; (2) determine the properties of physical materials; (3) develop test methods for materials, mechanisms, and structures; (4) establish standard practices in cooperation with other government agencies and the private sector;

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and (5) provide technical advisory services on a reimbursable basis to other Federal agencies. In addition to its primary responsibilities under the NBS Organic Act, NBS has responsibilities under 17 other statutes.

NBS is unique as a Federal agency in having an extremely broad mission which is relevant to nearly every national problem area and economic sector. The capabilities of NBS can be applied to a wide range of problems that affect economic development, enhanced innovation and productivity, and the use of energy and material resources. In addition, NBS has an important role in facilitating the transfer of technology between government, industry, and academia.

NATIONAL BUREAU OF STANDARDS

The administration's budget request for NBS for fiscal year 1985 totaled $126,062,000. A breakdown of that request is contained in table 1. The proposed budget for fiscal year 1985 represents an increase of $10,344,000 (9 percent) from the fiscal year 1984 appropriation of $115,718,000. The major programmatic decreases from fiscal year 1984 reflect the administration's intent to: (1) eliminate the Center for Fire Research (CFR) ($5,827,000) in fiscal year 1984); (2) eliminate the Center for Building Technology (CBT) ($3,969,000 in fiscal year 1984); (3) reduce funding for the Institute for Computer Sciences and Technology (ICST) ($5 million reduction from fiscal year 1984 level of $10 million to a fiscal year 1985 level of $5 million); (4) eliminate funding for the National Voluntary Laboratory Accreditation Program (NVLAP) ($560,000) and Measurement Assurance Programs (MAP) ($1,546,000), and concomitantly increase the user fees for these programs to cover research and development costs.

TABLE 1.—COMPARISON OF FISCAL YEAR 1985 BUDGET REQUEST WITH FISCAL YEAR 1984 FUNDS AVAILABLE FOR NATIONAL BUREAU OF STANDARDS

[Amounts in thousands]

	Fiscal year	
	1984	1985
Measurement research and standards:		
(1) Fundamental physical measurements and standards	(11,241)	(14,594)
(2) Radiation measurements and standards	(9,101)	(9,864)
(3) Analytical chemical measurements and standards	(2,601)	(2,810)
(4) Materials characterization, processing and performance	(14,801)	(17,758)
(5) Chemical properties and processes	(3,599)	(6,881)
(6) Measurement technology transfer	(6,398)	(4,612)
(7) Applied measurement program	(2,000)	(2,220)
Subtotal	49,741	58,739
Engineering measurements and standards:		
(1) Building research	(3,969)	(.....)
(2) Signals and systems metrology	(5,751)	(6,210)
(3) Chemical engineering metrology	(4,097)	(4,424)
(4) Engineering and products standards	(2,899)	(3,322)
(5) Mathematical sciences	(5,175)	(5,605)
Subtotal	21,891	19,561
Fire research subtotal	5,827	.....
Computer sciences and technology subtotal	10,000	5,000
Core measurement research for new technology subtotal	11,969	12,324
Central technical support:		
(1) Technical competence	(8,100)	(8,727)
(2) Central technical support	(8,190)	(21,711)
Subtotal	16,290	30,438
Total, National Bureau of Standards	115,718	126,062

The major programmatic increases over fiscal year 1984 reflect the administration's intent to: (1) expand research for process and quality control measurements ($2,500,000); (2) design a prototype cold neutron source for materials research ($1,500,000); (3) improve the scientific basis for industrial applications for biotechnology ($3 million); (4) procure a scientific computer for use by NBS and the National Oceanic and Atmospheric Administration ($8,874,000); and (5) replace the telephone system at the Gaithersburg site ($2 million).

In addition to a direct appropriation, NBS receives reimbursements and fees for technical advisory services and other work performed for government agencies and the private sector. Table 2 shows the estimated operating funds expected from all sources in fiscal year 1985. The total operating budget for NBS in fiscal year 1985 is expected to be $206,500,000.

TABLE 2.—TOTAL ESTIMATED NBS OPERATING FUNDS IN FISCAL YEAR 1985—ALL SOURCES

[Amounts in millions]

	STRS appropriation	Reimbursements from other Federal agencies and private sector	Total
Measurement research and standards:			
Fundamental physical measurements and standards	14.6	3.5	18.1
Radiation measurements and standards	9.9	5.8	15.7
Analytical chemical measurements and standards	2.8	5.8	8.6
Materials characterization, processing, performance	17.8	10.3	28.1
Chemical properties and processes	6.9	2.6	9.5
Measurement technology transfer	4.6	4.5	9.1
Applied measurement program	2.2	1.4	3.6
Subtotal	58.8	33.9	92.7
Engineering measurement and standards:			
Building research	.....	9.1	9.1
Signals and systems metrology	6.2	7.6	13.8
Chemical engineering metrology	4.5	5.7	10.2
Engineering and product standards	3.3	.6	3.9
Mathematical sciences	5.6	1.0	6.6
Technical reimbursable services	.....	3.6	3.6
Subtotal	19.6	27.6	47.2
Fire research subtotal	.....	3.4	3.4
Computer sciences and technology subtotal	5.0	3.5	8.5
Core measurements research for new technologies subtotal	12.3	7.9	20.2
Central technical support:			
Technical competence	8.7	.....	8.7
Capital transfer and facilities	21.7	.....	21.7
Subtotal	30.4	.....	30.4
Nontechnical support services	.....	4.1	4.1
Total, National Bureau of Standards	126.1	80.4	206.5

FINDINGS FROM THE HEARING

The Committee held a hearing March 6, 1984, on the fiscal year 1985 budget for NBS. The Director of NBS presented the administration's budget request and described the programmatic changes that such a budget would entail.

The Committee also received testimony from the chairperson of the ICST Evaluation Panel, the president of the National Conference of States on Building Codes and Standards, and representatives of pri-

vate industry. While all witnesses expressed high regard for the quality of the research performed at NBS, great concern was expressed over the administration's proposals to reduce or terminate several programs, as discussed below.

CENTER FOR FIRE RESEARCH

Fire research is conducted at NBS in the CFR, under the directive of the Federal Fire Prevention and Control Act of 1974 (Public Law 93–498). Prior to fiscal year 1983, funds for this program were passed through the U.S. Fire Administration to NBS. In fiscal year 1983, the funds were converted to a direct line-item appropriation to NBS.

The CFR does fundamental as well as applied research in areas such as combustion toxicology, flame chemistry and fire dynamics. In addition to the in-house research program, CFR funds an extramural grants program (totalling about $2 million in fiscal year 1984) to 30 universities and research institutions. The fire research program at NBS is recognized for its excellence, particularly in the mathematical modelling of fire spread.

At the 1983 hearing the consensus of testimony from the NRC Evaluation Panels for NBS, the Statutory Visiting Committee and outside witnesses, as well as from numerous private sector groups which submitted statements for the record, was that continued Federal support of the CFR is necessary because of its unique role in support of fire research and the training of fire scientists. This consensus was reaffirmed at the 1984 hearing in testimony from the National Conference of States on Building Codes and Standards.

CENTER FOR BUILDING TECHNOLOGY

The CBT, a division of the NBS National Engineering Laboratory, provides the technical basis for building standards, codes and specifications and also conducts analytical, laboratory and field research in engineering and physical sciences related to building construction. The program provides integrated, nonproprietary research data on building materials, systems and components.

The CBT research has led to improvements in Federal, State, and local codes and specifications, which have, in turn, resulted in: (1) reduced building costs; (2) improved testing and quality control of building materials and components; and (3) greater reliability and durability. In addition, the NBS responsibility under the Earthquake Hazards Reduction Act of 1977 is carried out by CBT. Direct appropriations account for about 31 percent ($3,969,000) of the total operating expenses at CBT, with the balance ($8,695,000) coming from other Federal agencies and private sources.

INSTITUTE FOR COMPUTER SCIENCES AND TECHNOLOGY

The ICST conducts its activities under several authorities. The primary statute is the Brooks Act (Public Law 89–306) which assigns to the Secretary of Commerce the responsibility to develop and recommend uniform Federal automatic data processing (ADP) standards and to undertake necessary research in computer science and technology.

MEASUREMENT TECHNOLOGY TRANSFER PROGRAM

The Measurement Technology Transfer Programs are the primary means by which NBS transfers its developed measurement techniques, standards and data to industry, universities and governments. These programs include MAP, NVLAP, and the Standard Reference Material Program.

The MAP and NVLAP provide services to insure measurement quality in commercial and government calibration and standards laboratories. Basic measurement, statistical capabilities and transfer standards have been developed for MAPs for quantities such as mass, voltage, microwave power, and X-ray dosage.

For the NVLAP, NBS develops performance criteria, establishes examination methodology, qualifies examiners, conducts workshops, and makes recommendations for accreditation to the Secretary of Commerce. Accredited laboratories provide assurance that products, including materials, components and systems, meet the criteria stated in engineering and product standards. The MAP and the NVLAP are supported by user fees. The fiscal year 1985 budget request proposed that in fiscal year 1985 the MAP and NVLAP be converted to full cost recovery to include the costs of research and development of new products and services.

COMMITTEE VIEWS

The administration requested a 2-year authorization, with a request for fiscal year 1986 of "such sums as may be necessary". The Committee does not believe an authorization without a specified amount is justified.

While the Committee strongly supports the importance of new initiatives at the National Bureau of Standards to expand the array of services which it offers, and to keep it current with state-of-the-art developments and innovation, the Committee does not believe that elimination or a drastic reduction of existing important programs is the appropriate approach for locating funding for these initiatives.

In developing its views, the Committee considered: statements from witnesses at the hearing of March 6, 1984, the annual reports from the National Academy of Sciences Evaluation Panels, reports of the NBS Statutory Visiting Committee, and statements and informal views expressed by many individuals in the private sector and in the academic community. On March 27, 1984, the Committee ordered to be favorably reported S. 2458, the National Bureau of Standards Authorization Act for fiscal year 1985. The bill, as reported, authorizes the appropriation of $131,643,000, plus additional sums as may be necessary for adjustments in salary, pay, retirement and other employee benefits for NBS. This sum is $5,581,000 more than was requested by the administration.

S. 2458, as reported, contains the following recommendations: The Committee has concluded that the CFR, CBT, ICST, and Measurement Technology Transfer Programs (MAP and NVLAP) perform valuable services for the Nation. In the case of the CFR and CBT, the Committee is convinced that the private sector is not prepared to assume responsibility for the services provided by the centers.

In the case of the ICST, the Committee concludes that a 50 percent cut in funding, as was proposed by the administration's budget, consisting of reductions in the areas of voluntary standards in the domestic arena, is contrary to the mandate of the NBS and to its acknowledged leading role in the area of computer network standards development.

While the Committee supports the concept of allowing NBS to charge for products and services, and to ask users to bear the costs associated with the actual delivery of products and services, the Committee believes that costs incurred by NBS for research and development of new products and services are appropriately the responsibility of NBS and should not be passed along to the users but rather, supported through NBS's direct appropriation.

The Committee has concluded that proposed new initiatives in process quality control and cold neutron research are important to the Bureau's statutory mandate and should be funded.

The Committee has included authorization of appropriations for acquisition of a consolidated advanced computing system, to be spread over a 2-year period.

The Committee has concluded that funding for the proposed new biotechnology initiative should not be provided until the NBS has developed a more comprehensive plan for the utilization of these funds. The Committee also finds that replacement of the existing telephone system at the Gaithersburg site is unnecessary and unwarranted at this time, particularly in light of the proposed drastic cuts in, or elimination of, important substantive research programs.

CENTER FOR FIRE RESEARCH

The administration has proposed the elimination of CFR. Both the testimony received at the hearing and other communications to the Committee confirm the judgment of the Committee that such a step is ill-advised and unwarranted.

The fire research program is the only Federal research effort aimed at reducing annual fire losses, particularly from residential fires. The United States continues to be among the leading nations in incidence of building fires and fire-related deaths on a per capita basis. Fires in residences account for 46 percent of the dollar losses and 77 percent of the fire-related deaths. The results of the research performed at CFR are used by designers, builders, standards committees and State and local codes officials to prevent fires, and to develop efficient fire-control practices. Through its grants program, CFR provides the link between university research and the needs of fire technology. This role is consistent with the administration's policy to support education and training in the context of federally funded research.

The private sector, either in contract research laboratories or in individual corporations, has neither the incentive nor the resources to conduct a comprehensive broad-based fire research program such as exists at the CFR.

Moreover, the Committee believes that a credible, neutral source of information such as that found in CFR is essential to protect the public interest, health and safety.

The consensus of testimony received from the NRC Evaluation Panels for NBS, the Statutory Visiting Committee and outside witnesses, as well as from numerous private sector groups which submitted statements for the record, was that continued Federal support of the CFR is necessary because of its unique role in support of fire research and the training of fire scientists. Testimony by the National Conference of States on Building Codes and Standards at the fiscal year 1985 hearing reaffirmed the importance of the CFR's work in fire research, and the inability of the States to carry out this research if the CFR were terminated.

The Committee does, however, urge that the NBS implement the recommendations of the Evaluation Panel with regard to the importance of active and effective liaison and communication between the CFR and fire service organizations.

CENTER FOR BUILDING TECHNOLOGY

The administration has also proposed the elimination of CBT. Numerous communications to the Committee confirm the judgment of the Committee that such a step is ill-advised and undesirable. The building research program at CBT is in much the same situation as the CFR. The construction industry is highly disaggregated. Few of the companies are equipped to conduct comprehensive or integrated research dealing with structural engineering, building materials, building equipment or systems. Most of the work that is carried out in industry is proprietary in nature, and the effort tends to focus on new product development and does not address the diverse technical problems of the building community. Several industries and Federal agencies fund generic research at CBT which is oriented toward performance and evaluation, precisely because of the high-quality technical expertise and unique experimental facilities available nowhere else. CBT also provides nonproprietary information for use by building code officials in revising codes and determining compliance.

The Committee is not convinced that the private sector could or would assume the role of carrying out primary research in the building sciences. Testimony at the hearing by the National Conference of States on Building Codes and Standards confirmed that the States do not have the resources to take over responsibility for the research performed at the CBT. The Committee believes that the research performed at CBT is vital to public health and safety, and is worthy of continued support.

The Committee intends that NBSS fund CBT at the fiscal year 1984 appropriation level. Moreover, funding for CBT should not be at the expense of other essential programs in NBS. The Committee bill provides funding for CBT at a level equivalent to the fiscal year 1984 appropriation level.

INSTITUTE FOR COMPUTER SCIENCES AND TECHNOLOGY

The administration proposed a budget reduction of 50 percent ($5 million) for ICST. Both the testimony received at the hearing and other communications to the Committee confirm the judgment of the

Committee that it is in the national interest for the Federal Government to conduct research, and develop policies and standards for the rapidly growing field of information processing, and, as a result of these activities, to promote and strengthen the international competitiveness of the U.S. computer, telecommunications and data processing industries.

The functions of ICST in ADP standards setting and in technical assistance to other Federal agencies have resulted in substantial savings to the Government. The Federal Government spent an estimated $10 billion in fiscal year 1982 on ADP. The work of ICST has led to increased compatibility of equipment and software from different vendors and to increased productivity and reliability of software and hardware through conversion of older programs, data and systems into new forms.

The Committee believes that the work performed by ICST is timely and appropriate. The Committee disagrees with the administration's view that these activities are more appropriate to the private sector. In fact, ICST already interacts very effectively with the private sector through the American National Standards Institute (ANSI) and is the only U.S. entity recognized by the International Standards Organization (ISO). ICST acts as a catalyst in the development of voluntary standards and neither intrudes on the province of industry nor performs any regulatory function.

The evaluation panel considers ICST a leader in many fields of computer science, particularly in network interface protocols and data encryption. The evaluation panel as well as representatives of the private sector (computer and communications equipment manufacturers and user industries) consider ICST an essential part of the process and development of voluntary computer standards, both nationally and internationally.

The Committee believes that the proposed reduction of 50 percent would have a drastic effect on both the technical programs of ICST and on ICT's ability to participate in vital domestic and international standards activities. The Committee bill, as reported. restores funding for ICST at fiscal year 1984 authorization levels.

The Committee reiterates its belief that substantially more attention to the education and clearinghouse function of ICST would be appropriate. The Committee believes the need for such an educational activity for use by both government agencies and the private sector continues to be substantial, and that ICST is uniquely positioned within the existing governmental structure to perform this function. The Committee agrees with the evaluation panel that the effectiveness of meeting the mandate of the Brooks Act could be greatly increased with an appropriate, well-directed effort in this area.

MEASUREMENT TECHNOLOGY TRANSFER

The administration has proposed that the MAP and the NVLAP be converted to full cost-recovery in fiscal year 1985, including cost-recovery for research and development. These programs are vital to the Bureau's ability to transfer its developed standards and products to the private sector.

Testimony at the hearing on March 6, 1984, indicated that the MAP program offers a new approach to making accessible the standards needed to ensure the quality of U.S. manufactured goods. Statements for the record and testimony at the hearing indicated that the NVLAP program plays an important role in overcoming such non-tariff barriers as the requirement by some countries that products be qualified by an accredited laboratory before introduction into their markets.

The Committee believes that those costs associated with the actual delivery of products and services should be borne by the users. But the Committee reiterates its position that costs incurred by NBS for research and development of new products and services are appropriately the responsibility of NBS and should not be passed along to the users but, rather, supported through NBS's direct appropriation.

The Committee agrees with the evaluation panel's assessment that a sudden large increase in prices to provide total R&D cost recovery would be devastating to the MAP, and would cripple the national measurement system.

PROCESS QUALITY CONTROL

The administration has proposed funding for development of advanced primary standards, and measurement methods ($2,500,000). The Committee believes that process quality control is perhaps the most fundamental service which the NBS offers to industry, because it involves the measurement base at NBS. The NBS has identified certain areas on which it will focus initially: Electrical and electronic measurement and standards, optical radiation standards, ionizing radiation and dosimetry standards, and vacuum and leak rate standards.

This initiative will enable NBS to expand present measurement capabilities, establish standards for quality control in new measurement areas, and provide data to industry for development of guidelines and voluntary standards. The Committee has included funding for this initiative because it believes that process quality control is a fundamental part of the services offered by NBS.

COLD NEUTRON SOURCE

The administration has proposed funding for construction of a cold neutron source facility for advanced nondestructive materials research. The funds requested in fiscal year 1985 ($1,500,000) would be used for construction of an improved, full-scale cold source at the NBS' existing research reactor. Initial experiments would be conducted using two prototype instruments.

The United States lags far behind other industrialized nations, particularly Great Britain, France and Germany, in the development of cold neutron research facilities, and in the research which such a facility would enable the United States to perform. Although the ultimate cost of the facilities would be approximately $23 million, the start of the initiative at $1,500,000 would enable initial experimentation to begin.

The facility at NBS is already compatible with installation of a cold source of sufficient volume for the development of the flexible array of instruments needed to give the U.S. research community a capability competitive with the rest of the world. The proposed cold neutron source will be managed and operated as the National Research Facility for industrial, university and Government scientists. Time on the cold neutron research facility will be available to all U.S. users, on the basis of allocation by an advisory committee. The Committee has included funding for this initiative because of its importance in bringing the United States up to world standards in the area of cold neutron research and because of the suitability of the NBS site.

BIOTECHNOLOGY

The administration has proposed funding for an initiative in biotechnology ($3 million) to develop a scientific basis for the use of biotechnology in chemical production and related industries. The proposal by the NBS would provide the generic data base and models needed by industry to develop process optimization strategies, tailor reaction conditions and understand generally the major chemical problems in the biotechnology field.

The importance of the biotechnology industry world-wide has been well documented. In the past decade, the commercial potential for directing the cellular machinery for the development of new and improved products and processes in a wide diversity of industrial sectors has been increasingly exploited. Currently the United States leads the world in both basic science and commercial development of new biotechnology, but Japan, West Germany, the United Kingdom, Switzerland, and France have targeted biotechnology as an area for economic growth.

The Committee believes, consistent with its directives of prior years, that the Bureau should develop an effective program in biotechnology, relevant to the needs of the industry. However, the Committee is concerned that the current proposal has not been adequately designed to ensure that it address the needs of industry, nor to ensure that it focus on the most important areas of research in measurement and standards in the biotechnology area.

The Committee, therefore, has not included funding for the biotechnology initiative at this time. The Committee directs the Bureau of Standards to reevaluate the appropriate use of funding in developments and standards for the biotechnology industry and related industries. The Committee directs the Bureau of Standards to report to the Committee by the end of calendar year 1984 with a plan on a national effort in measurements and standards for biotechnology, to be located at the NBS.

ADVANCED COMPUTING SYSTEMS

The administration has proposed funding for the procurement and installation at the Bureau of Standards of a class VI supercomputer and associated equipment to provide joint supercomputing capability

for the NBS and the NOAA Environmental Research Laboratory. The advanced computing capability will enhance NBS's ability to pursue long range solutions of important problems in such areas as atomic and molecular properties, radiation transport, electronics, materials, chemical processing, biotechnology, computer aided design/computer aided manufacturing, robotics, and automation, as well as the Environmental Research Laboratory's research into problems in the areas of aeronomy, wave propagation, severe storms and marine environment.

The Committee is convinced of the importance of advanced computing facilities to the Bureau's role as a leader in measurements and standards. The Committee has investigated thoroughly the advisability of purchase of a class VI supercomputer, and believes that the Bureau will be able to achieve full utilization of such facilities. However, the Committee believes that it is unlikely that procurement will be completed in fiscal year 1985 and for that reason has included funding for this request at one-half of that which was requested by the administration, with the intention of funding the remainder during fiscal year 1986.

BUDGET PRESENTATION

The Committee notes that, as in prior years, the NBS budget has been presented to the Committee in a format that is not conducive to a clear understanding of the Bureau's organizational arrangements, allocation of overhead costs, and funding of specific initiatives. The Committee directs the National Bureau of Standards to develop for fiscal year 1986 a format for its budget preparation which is well-organized, indexed, and clearly documents, in narrative fashion, the allocation of overhead costs.

OFFICE OF PRODUCTIVITY, TECHNOLOGY, AND INNOVATION

The primary goal of Office of Productivity, Technology, and Innovation (OPTI) is to stimulate increased technological innovation and productivity in the private sector. OPTI serves as the focal point, and as a catalyst, for the development of policies and cooperative activities between government, universities and industry in a variety of areas that influence industrial innovation and productivity. In addition, OPTI coordinates Federal patent policy, the voluntary conversion to the metric system and the implementation of the Stevenson-Wydler Technology Innovation Act (Public Law 96–480).

In fiscal year 1985, the administration requested $3,371,000 for OPTI activities. The Committee bill agrees with the requested amount.

Estimated Costs

In accordance with paragraph 11(a) of the rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget office:

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, D.C., April 4, 1984.

Hon. BOB PACKWOOD,
Chairman, Committee on Commerce, Science and Transportation, U.S. Senate, Washington, D.C.

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the attached cost estimate for S. 2458, the National Bureau of Standards Authorization Act for fiscal year 1985.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

RUDOLPH G. PENNER, *Director.*

CONGRESSIONAL BUDGET OFFICE—COST ESTIMATE

APRIL 4, 1984.

1. Bill number: S. 2458.

2. Bill title: National Bureau of Standards Authorization Act for fiscal year 1985.

3. Bill status: As ordered reported by the Senate Committee on Commerce, Science, and Transportation, March 27, 1984.

4. Bill purpose: S. 2458 authorizes the appropriation of $131.6 million in fiscal year 1985, plus such additional sums as may be necessary for adjustments in salary, pay, retirement and other employee benefits, for the activities of the National Bureau of Standards (NBS). In addition, the bill authorizes the appropriation of $3.4 million in 1985 for the Office of Productivity, Technology and Innovation (OPTI), and $0.6 million in 1985 for expenses incurred abroad to be paid in foreign currency. The bill would also allow NBS to adjust fees for certain goods and services to cover estimated replacement costs.

Fiscal year 1984 appropriations to date for the activities authorized by the bill are $120.0 million. The President's 1985 budget requests $130.0 million, including $5.2 million for transfer for working capital, for these programs.

5. Estimated cost to the Federal Government:

[By fiscal years, in millions of dollars]

	1985	1986	1987	1988	1989
Authorization level:					
Specified (Function 370)	135.6	.....	.....	.....	.....
Estimated (Function 920)	2.5	.....	.....	.....	.....
Total	138.1	.....	.....	.....	.....
Estimated outlays:					
Function 370	90.5	40.8	4.3	.....	
Function 920	2.2	.3	.....	.....	.....
Total	92.7	41.1	4.3	.....	.....

S. 2458 would allow NBS to increase fees for certain reference and calibration services to recover replacement costs. NBS would be allowed to use these fees to replace inventories; any amounts collected in excess

of replacement costs would be returned to the Treasury. According to NBS, additional fee collections of approximately $250,000 annually could be collected as a result of this provision, to be used for replacing inventories.

Basis of estimate: For purposes of this estimate it was assumed that the amounts authorized in the bill for 1985 would be appropriated prior to the beginning of the fiscal year. In addition, pay and other benefit increases of approximately $2.5 million in 1985 were estimated based on CBO's baseline projections. Outlays reflect historical spending patterns.

6. Estimated cost to State and local governments: None.

7. Estimate comparison: None.

8. Previous CBO estimate: On March 28, 1984, CBO prepared a cost estimate for H.R. 5172, as ordered reported by the House Committee on Science and Technology, March 27, 1984. The estimated 1985 authorization level in H.R. 5172 for the same programs authorized in S. 2458 was $140.5 million; estimated outlays were $94.3 million in 1985, $41.8 million in 1986, and $4.4 million in 1987.

9. Estimate prepared by: Mary Maginniss.

10. Estimate approved by: James L. Blum, Assistant Director for Budget Analysis.

Regulatory Impact Statement

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation:

The bill, as reported, provides authorization of appropriations to the Secretary of Commerce to carry out programs of NBS, including certain special statutory programs in fiscal year 1985.

The bill does not regulate business activity, or any private activity. The Committee concludes, therefore, that the implementation of this bill will have no impact on the personal privacy of any individual or business. No records will be required to be kept by any individual or business, nor will any reports need to be filed as a result of the enactment of S. 2458.

Section-by-Section Analysis

SECTION 1

Cites the short title as the "National Bureau of Standards Authorization Act for Fiscal Year 1985".

SECTION 2

Authorizes appropriations totalling $131,643,000 for fiscal year 1985 for the programs of the NBS.

SECTION 3

Authorizes appropriations of $600,000 for foreign currency expenses incurred outside the United States.

SECTION 4

Authorizes appropriations of $3,371,000 for the Office of Productivity, Technology, and Innovation.

SECTION 5

Authorizes appropriations of such sums as may be necessary for adjustments in salary, pay, retirement, and other employee benefits.

SECTION 6

Makes appropriations available for the period or periods specified in the acts making such appropriations.

SECTION 7

Amends section 12(f) of the National Bureau of Standards Organic Act of 1901 (15 U.S.C. 278b(f)) to:

1. Allow NBS to retain proceeds from fee increases for goods and services; and
2. Allow NBS to use this net income from goods and services provided to industry and other Federal agencies to replace equipment and inventories before net proceeds are paid into the general fund of the Treasury.

SECTION 8

Amends section 5 of the National Bureau of Standards Organic Act of 1901 (15 U.S.C. 274) to change the level of the Director of the Bureau to Level IV of the Executive Schedule.

Changes in Existing Law

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new material is printed in italic, existing law in which no change is proposed is shown in roman):

The Act of March 3, 1901

Section 5 of that Act

Sec. 5. The director shall be appointed by the President, by and with the advice and consent of the Senate. He shall have the general supervision of the bureau, its equipment, and the exercise of its functions. He shall make an annual report to the Secretary of the Treasury, including an abstract of the work done during the year and a financial statement. He may issue, when necessary, bulletins for public distribution, containing such information as may be of value to the public or facilitate the bureau in the exercise of its functions. *The director shall be compensated at the rate now or hereafter in effect for level IV of the Executive Schedule, pursuant to section 5315 of title 5, United States Code.*

Section 12 of that Act

SEC. 12. (a)–(e) * * *

(f) The amount of any earned net income resulting from the operation of the fund at the close of each fiscal year shall be paid into the general fund of the Treasury: *Provided*, That such earned net income may be applied [first] to restore any prior impairment of the fund, *and to ensure the availability of working capital necessary to replace equipment and inventories.*

TITLE 5, UNITED STATES CODE

Section 5315 of that Title

§ 5315. Positions at level IV

Level IV of the Executive Schedule applies to the following positions, for which the annual rate of basic pay shall be the rate determined with respect to such level under chapter 11 of title 2, as adjusted by section 5318 of this title:

* * * * * * *

Inspector General, Department of Defense.

Director, National Bureau of Standards, Department of Commerce.

Section 5316 of that Title

§ 5316. Positions at level V

Level V of the Executive Schedule applies to the following positions, for which the annual rate of basic pay shall be the rate determined with respect to such level under chapter 11 of title 2, as adjusted by section 5318 of this title:

* * * * * * *

Director, Geological Survey, Department of the Interior.

[Director, National Bureau of Standards, Department of Commerce.]

Director of Science and Education, Department of Agriculture.

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Calendar No. 831

98TH CONGRESS
2d Session

SENATE

REPORT
98-424

MOTOR CARRIER SAFETY ACT OF 1984

MAY 2 (legislative day, APRIL 30), 1984.—Ordered to be printed

Mr. PACKWOOD, from the Committee on Commerce, Science, and Transportation, submitted the following

REPORT

[To accompany S. 2174]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 2174) to provide for more effective motor carrier safety regulations and enforcement, and for other purposes, having considered the same, reports favorably thereon with an amendment in the nature of a substitute and recommends that the bill do pass.

PURPOSE OF THE BILL

The Bureau of Motor Carrier Safety (BMCS) of the Department of Transportation (DOT) is responsible for regulating the safety of trucks and buses operating in interstate commerce, including those transporting hazardous materials. Enforcement of the Federal motor carrier safety regulations, however, is constrained due to the small number of inspection personnel and the limited sanctions available for prosecution of safety violations.

In 1982, there were 31,759 truck accidents, resulting in nearly 2,500 fatalities and nearly 26,000 injuries, and causing $321 million in property damage. Bus accidents are far less numerous, with 861 accidents in 1982, but bus safety remains an issue of concern in this industry.

This legislation amends current motor carrier safety statutes administered by BMCS to provide for a comprehensive motor carrier safety program.

BACKGROUND AND NEEDS

Motor carrier safety has been an issue of considerable concern to the Commerce Committee for several years. The Committee has conducted extensive hearings and reported legislation on this issue in the 95th through the 98th Congresses.

Mayor steps were taken in 1982 to improve motor carrier safety with enactment of the Surface Transportation Assistance Act of

31-010 O

S263-6

1982 (P.L. 97–424). This act authorized a total of $150 million over fiscal years 1984 through 1988 to enable DOT to provide grants to States for enforcement of Federal and compatible State motor carrier safety regulations. In February 1984 testimony before the Surface Transportation Subcommittee, the DOT reported that it had already awarded $6,900,000 in Federal safety grants to 40 States under the Surface Transportation Assistance Act grant program. DOT expects grants to States to total $8 million in fiscal year 1984. This grant program is crucial to the enforcement of motor carrier safety regulations; States will be able to supplement the current Federal safety enforcement efforts.

The 1982 act also provided protection to trucking company employees who report safety violations. Section 405 of the act protects trucking company employees from discharge, discipline, or discrimination "because such employee (or any person acting pursuant to a request of the employee) has filed any complaint or instituted or caused to be instituted any proceeding relating to a violation with a commercial motor vehicle safety rule, regulation, standard or order, or has testified or is about to testify in such proceeding".

Trucking company employees are also protected from discharge, discipline, or discrimination if an employee refuses to operate a vehicle due to the employee's reasonable apprehension of serious injury to himself or to the public due to the unsafe condition of such equipment. The Department of Labor is to investigate employees complaints when such discriminatory activity is alleged. If a violation is discovered, the Secretary of Labor is directed to order affirmative action to abate the violation, including such remmedies as reinstatement and specified compensation and damages.

Nevertheless, the Committee believes that more must be done to enhance motor carrier safety. The following tables demonstrate the magnitude of the motor carrier safety problem:

TABLE 1.—MOTOR CARRIERS OF PROPERTY

	1978	1979	1980	1981	1982
Accidents	33,998	35,541	31,389	32,306	31,759
Fatalities	2,998	3,072	2,528	2,810	2,479
Injuries	32,757	32,126	27,149	28,533	25,779
Property damages	$200,153,506	$304,410,228	$355,106,000	$300,964,705	$321,305,836
Accident rate per million vehicle miles [1]	1.246	1.072	[2]	1.085	0.966
Fatality rate per 100 million vehicle miles [1]	9.342	8.903	[2]	9.129	7.245

[1] Figures for roughly 80 percent of trucks reporting to BMCS.
[2] Not available.

TABLE 2.—MOTOR CARRIERS OF PASSENGERS

	1978	1979	1980	1981	1982
Accidents	728	719	748	832	861
Fatalities	68	60	74	95	76
Injuries	1,917	1,977	1,711	2,041	2,003
Property damage	$4,023,000	$4,485,000	$4,659,000	$5,291,000	$5,565,551
Accident rate per million vehicle miles [1]	0.690	0.580	0.600	0.610	[2]
Fatality rate per 100 million vehicle miles [1]	5.320	4.330	4.920	8.770	[2]

[1] Figures for Class I bus companies only.
[2] Not available.
Source: U.S. Department of Transportation, Bureau of Motor Carrier Safety.

The Committee believes the regulations governing commercial motor vehicle safety must be comprehensively restructured to provide DOT broader enforcement authority, greater uniformity in motor carrier safety regulation, an improved system of penalties for violations of safety regulations, and a meaningful system for determining the safety fitness of motor carriers operating in interstate commerce.

Legislative History

On June 14, 1983, the Senate Commerce Committee conducted a hearing on title III of S. 1108 (the Highway Safety Act of 1983), which pertains to motor carrier safety. On September 20, 1983, the Committee ordered reported S. 1108, as amended, by a voice vote.

On November 18, 1983, title III of S. 1108 as reported, and two provisions of title I of that bill, were introduced as S. 2174. On February 9, 1984, the Surface Transportation Subcommittee conducted a hearing on S. 2174. Testimony was presented by representatives of the DOT, trucking and intercity bus industry groups, the Interstate Commerce Commission (ICC), organized labor, and State regulatory agencies.

On March 27, 1984, the Committee ordered reported S. 2174, with an amendment in the nature of a substitute, by voice vote.

Estimated Costs

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

U.S. Congress,
Congressional Budget Office,
Washington, D.C., April 18, 1984.

Hon. Bob Packwood,
Chairman, Committee on Commerce, Science and Transportation, U.S. Senate, Dirksen Senate Office Building, Washington, D.C.

Dear Mr. Chairman: The Congressional Budget Office has reviewed S. 2174, the Motor Carrier Safety Act of 1984, as ordered reported by the Senate Committee on Commerce, Science and Transportation, March 27, 1984. Assuming enactment by July 1, 1984, we expect that it would result in a cost to the federal government of less than $1 million over the fiscal years 1984 and 1985, and in no significant costs to state or local governments.

This bill directs the Secretary of Transportation to establish and revise regulations related to the safe operation of commercial trucks and buses. It also requires the Department of Transportation to study the safety characteristics of heavy trucks, methods of crash protection for truck occupants, and the effectiveness of safety-related devices on motor-driven vehicles. The bill authorizes the appropriation of such sums as may be necessary to complete these studies. Based on information from the Department of Transportation, we estimate that the studies on heavy trucks and crash protection would cost between $0.3 million and $0.4 million each, and the study on safety-related devices would cost about $0.1 million.

The bill also requires the Secretary of Transportation to establish standards for annual inspections of commercial motor vehicles. These standards could require motor carrier companies to undertake self-inspection programs and retain these records. Alternatively, states could be made responsible for ensuring that vehicles are inspected annually, either using government-operated facilities or private garages licensed by the state. Twenty-two states, plus the District of Columbia, currently require periodic inspection of commercial motor vehicles, but only three use government-operated facilities. These are supported by fees paid either when the vehicle is registered or at the time of inspection. Based on this experience, it is likely that other states would also recover any inspection costs through fees. If so, this provision would have no significant impact on state or local budgets.

On September 30, 1983, CBO prepared a cost estimate for S. 1108, the Highway Safety Act of 1983, as ordered reported by the Senate Committee on Commerce, Science and Transportation. That bill required the same studies as S. 2174, but also authorized funding for an incentive grant program to aid state safety programs. S. 1108 also specifically authorized $1.2 million in 1984 and $1.4 million in 1985 for a heavy truck study, while the current bill authorizes such sums as may be necessary. Both bills, however, require the study to be completed by September 30, 1985. To accommodate the shorter time-frame imposed by this bill, the Department would have to narrow the scope of the study, but still expects to meet the minimum requirements of the bill. The estimated costs reflect these differences.

If you wish further details on this estimate, we will be pleased to provide them.

Sincerely,

RUDOLPH G. PENNER,
Director.

REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation:

NUMBER OF PERSONS COVERED

S. 2174 confers additional regulatory authority on DOT to improve the existing safety regulation of commercial motor vehicles and clarifies DOT's regulatory role over the health of commercial motor vehicle operators. The commercial motor vehicle operations affected, except those operations "affecting" interstate commerce, are covered by existing laws and regulations.

ECONOMIC IMPACT

Section 14 authorizes appropriation of such sums as may be necessary to conduct a comprehensive study of the safety characteristics of heavy trucks, the unique problems related to heavy trucks, and the manner in which such trucks are driven.

Section 15 authorizes appropriation of such sums as may be necessary to study truck occupant protection, including examination of potential and known hazards to truck occupants and means of improving truck occupant safety.

Section 16 authorizes appropriation of such sums as may be necessary for fiscal years 1985 and 1986 to conduct a study of safety-related warning devices.

The above funding levels are envisioned to be modest and are not expected to have an inflationary impact on the Nation's economy.

Section 9 sets forth civil and criminal penalties for violations of Federal commercial motor vehicle safety regulations. These fines are intended to increase compliance with these regulations, but the Secretary, in determining the level of the fine, must consider a violator's ability to pay and the effect of the fine on a person's ability to continue to do business.

PRIVACY

S. 2174, as reported, will not have any adverse impact on the personal privacy of the individuals affected.

PAPERWORK

Sections 11, 12, and 13 require DOT to initiate rulemaking activities regarding various motor carrier safety issues. Specifically, section 11 requires DOT to initiate a rulemaking on petitions filed by States seeking to retain motor carrier safety regulations which are in addition to or more stringent than the Federal motor carrier safety regulations. Section 12 requires DOT to initiate a rulemaking related to commercial motor vehicle inspection requirements established by S. 2174. Section 13 requires DOT to initiate a rulemaking related to establishment of a procedure to determine the safety fitness of commercial motor vehicles.

S. 2174 also requires studies: (1) section 6 requires the Secretary of Transportation, in consultation with the Director of the National Institute for Occupational Safety and Health and the Secretary of Labor, to conduct a study of health hazards related to commercial motor vehicle operations; (2) section 14 requires the Secretary to study the safety characteristics of heavy trucks; (3) section 15 requires the Secretary to study truck occupant protection; and (4) section 16 requires the Secretary to study safety-related emergency warning devices.

Section 6 requires the Secretary to coordinate the safety and health activities of Federal agencies and to attempt to minimize paperwork burdens. This should lessen paperwork requirements on persons subject to Federal commercial motor vehicle safety regulations and on Federal agencies.

Section-by-Section Analysis

Section 2.—Purposes

This section states that the purposes of this act are: to promote the safe operation of commercial motor vehicles in or affecting interstate commerce; to minimize dangers to the health of commercial

motor vehicle operators and other employees whose employment directly affects motor carrier safety; and to assure increased compliance with traffic laws and with the commercial motor vehicle safety and health rules and regulations issued pursuant to this act. The Committee continues to be concerned about the safety of commercial motor vehicle equipment and the safety records of drivers.

Section 3.—Findings

This section states that the Congress finds: that it is in the public interest to enhance motor vehicle safety; that improved, more uniform commercial motor vehicle safety measures and strengthened enforcement would reduce fatalities, injuries, and property damage related to commercial motor vehicle operations; that enhanced protection of the health of commercial motor vehicle operators is in the public interest; and that States can play an important role in enhancing motor carrier safety.

Section 4.—Definitions

This section defines various terms as used throughout this act.

One of the most significant of the definitions is contained in section 4(1), "commerce." At present, the Secretary of Transportation is empowered to regulate commercial motor vehicle safety primarily with regard to vehicles that cross State lines or national boundaries or perform the intrastate portion of a continuous interstate movement. This class of vehicles is operated primarily by carriers who must obtain operating authority from the ICC plus private and exempt interstate carriers. This definition would authorize the Secretary to promulgate regulations regarding the safety of commercial motor vehicle operations both in and affecting interstate and foreign commerce.

While the definition of commerce in S. 2174 constitutes an extension of DOT's existing authority, the Committee emphasizes that it intends that DOT use this expanded authority cautiously. Under current law, DOT has exempted from its regulations certain types of commerce, such as that which occurs within commercial zones. Section 6 of S. 2174 provides DOT with comparable authority to waive application of any Federal motor carrier safety rule, regulation, standard, or order established pursuant to S. 2174 if such waiver is not contrary to the public interest and is consistent with the safe operation of commercial motor vehicles. This waiver authority, therefore, will enable BMCS to exempt, as it has in the past, certain types of commerce from the Federal motor carrier safety regulations in cases of small-distance, low-risk transportation.

The definition of "commercial motor vehicle" in section 4(2) includes vehicles used on the highways in commerce which are: (1) 10,000 pounds gross vehicle weight rating or more; (2) designed to transport more than 15 passengers, including the driver; or (3) used in the transportation of hazardous materials (found to be hazardous by the Secretary for purposes of the Hazardous Materials Transportation Act, 49 U.S.C. 1801 et seq.). The 10,000-pound limit, which is in the current BMCS regulations, is proposed to focus enforcement efforts and because small vans and pickup trucks are more analogous to automobiles than to medium and heavy commercial ve-

hicles, and can best be regulated under State automobile licensing, inspection, and traffic surveillance procedures. However, all vehicles designed to transport 15 or more persons, except school buses when used to transport school children to and from school or school events, would also be covered to assure the highest levels of safety in this particularly important transportation area. In addition, vehicles transporting hazardous materials would be covered because of the potentially greater safety dangers in this area. S. 2174 does not, however, alter any of the law contained in or the regulations promulgated by DOT pursuant to the Hazardous Materials Transportation Act, which under S. 2174 will continue to govern hazardous materials transportation.

The definition of "employee" in section 4(3) includes any individual other than an employer who is employed by a commercial motor carrier and directly afiects commercial motor vehicle safety, such as (1) a driver of a commercial motor vehicle (including for purposes of this title any independent contractor while in the course of personally operating a commercial motor vehicle) ; (2) a mechanic; or (3) a freight handler. The Committee emphasizes that its inclusion of independent contractors under the definition of employee is for the purposes of S. 2174 only; the Committee does not intend that this definition be construed as affecting the interpretation of the Internal Revenue Service as to the status of independent contractors under the tax laws.

An employer is defined in section 4(4) as any person engaged in a business affecting commerce who owns or leases a commercial motor vehicle in connection with that business, or assigns employees to operate it in commerce.

Independent owner-operators' employment status posed a unique problem to the drafters. An independent owner-operator owns his own truck and drives it. He also may own several other trucks and have several drivers working for him. There was no question that the commercial motor vehicles he drives and his driving should be subject to the same safety rules as other commercial motor vehicles on the highway. All commercial motor vehicles if improperly maintained or operated pose a significant threat to the public safety.

It was decided that where an independent owner-operator has the primary responsibility for the maintenance and operation of his commercial motor vehicle or vehicles he should be considered an employer and be subject to the penalty provisions for employers. This is appropriate because the owner-operator does have primary control over the vehicle. Yet the Committee was sensitive to the fact that the financial status of certain owner-operators is closer to that of employees who are subject to much lower penalties. Therefore, in the actual language of section 9 relating to penalties and the report language accompanying the section, the Committee makes clear that, in determining the amount of the penalty, financial status (among other factors), is to be taken into account.

This section also defines the terms "passenger automobile", "person", "Secretary" (that is, the Secretary of Transportation), and "State".

Section 5.—Duties

This section requires employers and employees to comply with the health and safety rules, regulations, standards and orders issued pursuant to this title.

Section 6.—Regulatory authority and standards

This section requires the Secretary of Transportation to establish and revise as necessary rules, regulations, standards, and orders to further the purposes of this act. The section provides that they shall be directed to assuring that (1) commercial motor vehicles are safely maintained, equipped, loaded, and operated; (2) the responsibilities imposed on a driver do not impair his ability to operate the vehicle safely; (3) the physical condition of drivers is adequate to enable them to drive safely; (4) the operation of commercial motor vehicles does not create deleterious effects on the physical condition of such drivers.

The Secretary is required to consider, where practicable, costs and benefits before establishing or revising such rules, regulation, standards, and orders. In requiring the Secretary to consider costs and benefits, where practicable, in the course of regulatory activities, the Committee realizes that many aspects of safety and health regulation do not lend themselves to detailed cost-benefit analysis. However, the Committee intends that DOT, in issuing a regulation, will perform some type of cost-benefit analysis, recognizing that while the benefits of a particular rule or regulation may be substantial, they may not be quantifiable. Additionally, the Committee does not intend such requirement to have the effect of precluding, preventing, or suspending the promulgation or revision of rules, regulations, standards, or orders due to difficulty in establishing specific, quantified cost or benefit data.

This section also requires the Secretary of Transportation to promulgate rules or regulations, both those under this act and those under current law, within 1 year after commencing a proceeding. The Committee intends that the date of publication of a Notice of Proposed Rulemaking constitute the commencement of a proceeding. If this is not possible, the Secretary is required to keep the Congress informed of the reasons for the delay and the efforts and progress being made to complete the proceeding. The purpose of this section is to provide incentives to the DOT to promulgate rules and regulations in a timely manner.

Section 6(c) allows the Secretary to waive the application of any rule, regulation, standard, or order if such waiver is not contrary to the public interest and is consistent with the safe operation of commercial motor vehicles. This provision should be used with extreme care and should only be used if the Secretary has developed sufficient information to provide adequate assurance that such waiver will not adversely affect the safe operation of commercial motor vehicles. However, the Committee expects that BMCS will continue current exemptions for commerce within commercial zones if that transportation continues to be low-risk.

Section 6(d) directs the Secretary of Transportation, in consultation with the Director of the National Institute for Occupational Safety and Health and the Secretary of Labor, to conduct a study of health hazards to which employees engaged in the operation of commercial motor vehicles are exposed and to develop findings regarding the most appropriate method for regulating and protecting the health of operators of commercial motor vehicles. This study is to be submitted to Congress within 1 year of the date of enactment.

The Committee understands that DOT will find this study out of previously authorized funds.

Section 6(e) requires the Secretary of Transportation to coordinate the activities of Federal agencies to ensure adequate protection of the safety and health of operators of commercial motor vehicles. The Secretary is also directed to attempt to minimize paperwork and other burdens.

The Committee believes it is important to clarify the respective roles of the various Federal agencies in ensuring the safety of commercial motor vehicle operations and the health of operators.

The Secretary of Transportation has the responsibility of protecting the public from unsafe commercial motor vehicles and assuring that commercial motor vehicles are safely maintained, equipped, loaded, and operated, and, therefore, is responsible for related matters insofar as failure to observe pertinent regulations would adversely affect the safety of the public or the health and safety of operators of commercial motor vehicles. However, the Secretary of Transportation is not responsible for protecting employees from asbestos fibers, and toxic fumes involved in the course of properly repairing a brake, nor for the protection of employees from slippery walking surfaces or from inadequately braked forklift trucks, which activities continue to be the responsibility of the Department of Labor.

It is the intent of the Committee that nothing in section 6 of the bill alter this state of affairs which has developed under existing provisions of law. Rather the Committee intends to reaffirm the scope of DOT's authority to regulate safety in this area.

At the same time, the Committee has concluded that neither Department has focused its attention to the extent the Committee believes desirable upon the hazards that commercial motor vehicle drivers face in the course of their work. The Committee bill therefore directs the Secretary of Transportation, in consultation with the Director of the National Institute for Occupational Safety and Health and the Secretary of Labor, to conduct a study of safety and health hazards to drivers, so that the two regulatory authorities will have the information necessary to determine the extent to which they should utilize their respective expertise to deal with these problems.

Section 6 does not provide additional or new regulatory authority to the Secretary of Labor or the Director of the National Institute for Occupational Safety and Health; the DOT Secretary is mandated under this bill to assure the protection of the safety and health of operators while operating commercial motor vehicles. This section requires the Secretaries and the Director to make every attempt to avoid overlap or duplication of activities and to coordinate their efforts. The Committee intends, in the exercise of its regular oversight authority, to follow further developments in these areas of concern.

Section 7—General Powers

This section provides the Secretary of Transportation with broad administrative powers to assist in the implementation of this title.

This section also requires the Secretary or his agents, in carrying out investigation functions, to consult with employers and employees and their authorized representatives and offer them a right of ac-

companiment, as appropriate. The Committee does not intend this requirement to limit unduly DOT inspections or to prevent DOT from undertaking surprise inspections, as is current practice in certain cases. The Committee does, however, intend that employers and employees be consulted and offered a right of accompaniment whenever possible, without hampering DOT inspection efforts.

The Committee understands that DOT possesses the necessary authority under current law to obtain warrants as needed to conduct such inspections.

With respect to enforcement, the Committee emphasizes the importance it attaches to the motor carrier safety grants-in-aid program established under title IV of the Surface Transportation Assistance Act of 1982. That program enables States to provide crucial enforcement activities which serve to supplement Federal motor carrier safety efforts.

Section 8—Duty to investigate complaints; protection of complainants

This section requires the Secretary of Transportation to investigate nonfrivolous written complaints alleging a material violation of this act, the Secretary is also required to take steps to protect the identify of complainants.

Section 405 of the Surface Transportation Assistance Act of 1982 provided that trucking company employers may not discharge, discipline or discriminate against an employee because that employee: (1) filed a complaint or instituted or caused to be instituted any proceeding relating to a violation of a commercial motor vehicle safety regulation; (2) has testified or is about to testify in any such proceeding; (3) refused to operate a vehicle when such operation constitutes a violation of any Federal regulations applicable to commercial motor vehicle safety or health; or (4) has reasonable apprehension of serious injury to himself or the public due to the unsafe condition of such equipment. The section also specifies procedures for dealing with trucking company employees' complaints.

Section 8 of S. 2174 builds on the provisions in section 405 of the 1982 act, to require investigation of nonfrivolous written complaints related to motor carrier operations. The Committee intends that it be clear that a mechanism exists whereby trucking and bus company employees may submit complaints to the DOT concerning material safety violations. The Committee envisions, however, that DOT will focus its resources on the most egregious cases brought to its attention; DOT may investigate the written complaints submitted pursuant to this section to the extent that each such complaint warrants.

Section 9.—Penalties

Section 9(a) amends section 507 of title 49, United States Code, to allow the Attorney General, at the request of the Secretary of Transportation, to bring an action for equitable relief to redress a violation of this act or existing Federal commercial motor vehicle safety standards.

Section 9(b) amends section 521(b) of title 49 to set forth civil and criminal penalties available to the Secretary for enforcing violations of this act or existing. Federal commercial motor vehicle safety standards and the procedure for the Secretary to follow if he

finds that a violation has occurred. The Committee believes the broader penalty authority and increased penalty levels set forth in this section are necessary to ensure increased compliance with the Federal commercial motor vehicle safety regulations.

Subsection (b) provides for a civil penalty of up to $500 for a recordkeeping violation. The total of all recordkeeping violations shall not exceed $2,500, and recordkeeping is the only violation for which penalties are cumulative. If the Secretary determines that a serious pattern of safety violations, other than recordkeeping requirements, exists or has occurred, a civil penalty of up to $1,000 for each violation may be assessed, to a maximum fine for each such pattern of violations of $10,000. If the Secretary determines that a substantial health or safety violation exists or has occurred which could reasonably lead to or has resulted in serious personal injury or death, a civil penalty of up to $10,000 may be assessed for each offense. However, no civil penalty, except recordkeeping penalties, may be assessed against an employee unless the employee is the operator of a commercial motor vehicle and the Secretary of Transportation determines that the employee's actions constituted gross negligence or reckless disregard for safety, in which case such employee shall be liable for a civil penalty up to $1,000. The Committee expects that drunk and drugged driving would constitute such behavior. In assessing civil penalties, the Secretary is to take into account the nature, circumstances, extent, and gravity of the violation and the degree of culpability, history of prior offenses, ability to pay, and effect on ability to continue to do business of the violator. The assessment is to be calculated to induce further compliance.

The Committee believes that an employee who is operating a commercial motor vehicle in a grossly negligent manner or with reckless disregard for safety and in violation of this title should be subject to a civil penalty. At the same time, the Committee recognizes the fact that employees and employers enjoy a different financial status. The level of penalty necessary to provide a deterrent to an employer could have the effect of financially bankrupting an employee. The different levels of penalties for employers and employees are designed, therefore, to create adequate incentives to assure compliance with the act.

The Committee also emphasizes that, for the puurposes of this act only, an owner-operator while in the course of personally operating a commercial motor vehicle for a commercial motor carrier is considered an employee for penalty purposes. When the owner-operator is not acting in such capacity, for purposes of this title he shall be treated as an employer. However, the Secretary, in assessing a civil penalty for an owner-operator or any other carrier, is directed to take into account, among other criteria, the ability to pay and effect on ability to do business.

The Committee recognizes that the safety regulation and monitoring of a vast trucking industry and a large intercity bus industry cannot be done without a large degree of voluntary compliance and documentation by records to validate the safety compliance efforts of the 200,000 individual companies that derive their livelihood from the conduct of their business on the public highways. Thus, the bill provides authority to require safety records—for example, hours-of-service

records, vehicle inspection and maintenance records, and driver qualification records. The bill also provides sanctions for the willful failure to prepare, use and retain such records that can be audited by State and Federal authorities.

Certain equipment violations, if allowed to continue, will result in accidents, deaths, injuries, and public property damage. These defects are so blatant that no carriers or drivers could have operated vehicles on the public highway without knowing that the defects exist, and therefore, chose to disregard public safety. These kinds of violations include defective brake systems, loose steering boxes, broken rims or wheel studs, and tires worn into the casing. The bill provides criminal and civil penalties for this type of aggravated violation of the law and rules of safety.

There is a middle range of violations between those of recordkeeping noncompliance and willful cast of negligence. These types of violations are those in which a carrier or driver simply fails to maintain equipment or disregards hours-of-service limitations because it is inconvenient or because it is profitable not to comply with the equipment standards and operational safety rules. These types of violations are not the isolated human errors, but are tolerated patterns of equipment violations or operating conduct that any responsible business entity could detect and correct if it wanted to meet its full safety responsibility to the public. The bill provides for sanctions for those "serious patterns of safety violations" that individually would not have a high probability of causing an immediate accident, but collectively demonstrate an unwillingness to exercise proper safety superivision or control, which will lead to accidents. These types of violations include general failure to maintain equipment, control hours of service, or screen drivers' qualifications before dispatching the drivers and vehicles into commerce. In granting this authority for the middle range of violations, the Committee expects the DOT to focus on serious patterns of violations and, in assessing penalties, to take into account the various factors enumerated in the bill, including the extent and gravity of the patterns and the ability of the carrier to pay.

This subsection authorizes the Secretary to require a violator to post a copy of a notice of violation or a statement thereof. The Secretary is also authorized to place a vehicle or an employee operating such vehicle out of service or to order an employer to cease all or part of his commercial motor vehicle operations if the Secretary determines that an imminent hazard to safety exists. "Imminent hazard" is defined as any condition of vehicle, employee, or commercial motor vehicle operations which is likely to result in serious injury or death if not discontinued immediately.

Subsection (b) provides for criminal penalties for employers and employees operating a commercial motor vehicle who knowingly or willfully violate the provisions of section 3102 of title 49, United States Code, or this act. Penalties for an employer are a fine of up to $25,000 and/or imprisonment not to exceed 1 year. An employee is subject to a $2,500 fine, which the Committee believes is sufficient deterrent for an employee, who would also be subject to employer sanctions and State laws.

The Secretary is required to promulgate regulations establishing penalty schedules designed to induce timely compliance for those fail-

ing to comply promptly with the requirements set forth in notices and orders. Subsection (b) also provides for review of orders issued under this subsection and provides that penalties and fines imposed shall be deposited into the Highway Trust Fund. The Committee encourages the DOT to allocate these funds for use in improving the National Driver Register.

In any action brought under this subsection, process may be served without regard to the territorial limits of the district or the State in which the action is brought. This subsection provides procedures for criminal contempt proceedings in accordance with the Federal Rules of Criminal Procedure.

Section 10—Litigation authority

This section amends Public Law 97–424 to require the Department of Justice to represent the DOT in litigation related to highway safety.

Section 11—State regulations

Section 11(a) parallels language in the Federal Railroad Safety Act of 1970 (45 U.S.C. 434). This section requires that State motor carrier safety laws, rules, regulations, orders, and standards be nationally uniform to the extent practicable. A State may adopt or continue in effect a law, rule, regulation, order, or standard until the Secretary has adopted a rule, regulation, order, or standard regarding the subject matter of such State requirement. In this regard, the Committee assumes that DOT regulations already in effect need not be readopted.

Subsection (b) provides a procedure whereby a State which has additional or more stringent commercial motor vehicle safety laws, rules, regulations, standards, or orders may petition the Secretary for review. Within 120 days of enactment, each State which has an additional or more stringent commercial motor vehicle safety law, rule, regulation, standard, or order is to petition the Secretary for review of each such law, rule, regulation, standard, or order. Any additional or more stringent State requirement which is not identified by a State in its petition to the Secretary will be preempted 120 days after the date of enactment of this act.

Subsection (c) requires the Secretary to initiate a rulemaking on each State petition filed pursuant to subsection (b) and to issue a final rule in each such rulemaking proceeding within one year after the date of enactment of this act. If the Secretary determines that any such rulemaking will not be completed within that 1-year period, the Secretary is to notify the Congress and furnish the reasons for the delay. The Committee intends that the Secretary quickly determine which State requirements are to remain in effect. Nevertheless, the Committee recognizes the need for flexibility in this rulemaking process, especially as many State legislatures do not meet annually. The Secretary, therefore, has the authority to defer action on some State regulations in such cases.

Subsection (c) provides that a State may continue in effect an additional or more stringent law, rule, regulation, standard, or order upon a finding by the Secretary, in the rulemaking procedure established in subsection (b), that there is a compelling local safety need therefor, that the State requirement is not incompatible with Federal safety requirements, and that it will not unduly burden interstate commerce.

Any State safety law, rule, regulation, standard, or order which the Secretary determines does not meet the specified criteria will cease to have any effect 60 days after the Secretary's final decision is published in the Federal Register.

Subsection (d) provides that any State seeking to put into effect an additional or more stringent commercial motor vehicle safety requirement after the date of enactment of this act shall petition the Secretary for review. The Secretary is required to initiate a rulemaking on each such petition and shall issue a final rule within 180 days after receipt of a State's petition. A State may adopt an additional or more stringent safety requirement subject to meeting the criteria specified for State regulations in effect on or prior to the date of enactment of this act.

It is the Committee's intention that there be as much uniformity as practicable whenever a Federal standard and a a State requirement cover the same subject matter. However, a State requirement and a Federal standard cover the same subject matter *only* when meeting the minimum criteria of the less stringent provision causes one to violate the other provision on its face. This is called the "enforcement test."

Application of this enforcement test to the Federal regulations contained in 49 C.F.R. and a body of State requirements will result in the State requirements being grouped into one of three types.

—*Type A*. State requirements that cover the same subject matter as the Federal regulation but are "additional or more stringent".

—*Type B*. State requirements that cover the same subject matter as the Federal regulation but are not "additional or more stringent".

—*Type C*. State requirements where there is not a Federal standard regarding the same subject matter.

The bill requires that the States must provide a list of all *Type A* requirements within 120 days of the date of enactment. *Type B* requirements would be preempted at this point. *Type C* requirements would not be affected unless and until a Federal regulation was promulgated in the same subject matter as the State requirement.

An example helps to illustrate this meaning. The only general driver age requirement of the Federal Motor Carrier Safety Regulations (FMCSR) is that the driver of a commercial motor vehicle be at least 21 years old (49 C.F.R. 391.11 (b)(1)). Assume that a State allowed 18-year-olds to drive commercial motor vehicles during the day, required drivers to be 25 to drive such vehicles at night, and imposed a maximum driving age of 65 years.

The enforcement test is applied by comparing each State requirement to the applicable Federal requirement to determine whether meeting the minimum criteria of the less stringent provision causes one to violate the other provision on its face. An 18-year-old who complies with the State requirement violates the Federal regulation. Therefore, the two requirements cover the same subject matter and since the State requirement can be met by a larger group of people, it is a less stringent *Type B* requirement and would be preempted. A 21-year-old who drives at night complies with the Federal requirement but violates the State requirement on its face. Since it is easier to meet the Federal requirement, the State requirement is additional and

more stringent and is *Type A*. The test of additional and more stringent is a single test that is applied after a State requirement and a Federal regulation are determined to cover the same subject matter.

The enforcement test is applied to the age 65 requirement by checking to see whether meeting the minimum criteria of the less stringent provision (being 21 and complying with the Federal regulation) violates the State requirement. It obviously does not. When the Federal regulation establishes only minimum criteria, it does not prevent a State from setting maximum criteria.

Application of the enforcement test determines that the 25-year-old requirement is Type A, the 18-year-old requirement is Type B, and the 65-year-old requirement is Type C. The Type A requirement would continue in effect while the Secretary conducted a rulemaking to see if the additional and more stringent requirements met certain tests. The State requirement would be effective at the end of the rulemaking if the Secretary determined that the State requirement did not unduly burden interstate commerce and was not incompatible with the Federal regulations, and there was a compelling local need for the more stringent standard. Type B is preempted, and Type C continues in effect.

In adopting this section, the Committee does not intend that States with innovative safety requirements that are not identical to the national norm be discouraged from seeking better ways to protect their citizens, so long as a strong safety need exists that outweighs this goal of uniformity. Section 11 emphasizes the need for uniformity but allows some flexibility for State requirements which strengthen safety. Also, the Committee does not intend that this section alter the preemption standard of consistency in the Hazardous Materials Transportation Act, which would apply to commerce regulated pursuant to that act.

Subsection (e) states that this act shall not affect existing State hour-of-service regulations applying to commercial motor vehicle operations occurring wholly within the State unless the Secretary of Transportation finds upon review of a State's hours-of-service regulations that such State regulations materially diminish commercial motor vehicle safety or health, are not required by compelling local conditions, or unduly burden interstate commerce. If such an affirmative determination is made by the Secretary, a State may be required to adopt Federal hours-of-service regulations.

As the Federal and State laws are being conformed in accordance with this section, the Committee expects that the current Motor Carrier Safety Advisory Committee will assist in that effort.

Section 12—Inspection

Section 12(a) requires all commercial motor vehicles to pass an equipment inspection based on Federal standards, no less often than annually. Section 12(b) requires the Secretary to establish by rule Federal standards for these commercial motor vehicle inspections and for the retention by employers of records of such inspections.

The Committee does not intend this to be a burdensome requirement. Many motor carriers currently have excellent self-inspection programs. The Committee expects and intends that the inspection requirement could be met by such programs.

In establishing this inspection requirement, the Committee seeks to ensure that inspection programs are uniform throughout the country and meet certain specified minimum safety requirements. This requirement is not intended, however, to preclude current roadside inspection procedures if they meet the Federal standards to be established under this section.

Section 12(c) requires the Secretary to initiate a rulemaking within 60 days of the date of enactment to afford interested parties an opportunity to comment on part 393 of subchapter B of chapter 3 of title 49, Code of Federal Regulations and on the inspection and retention procedure required under subsection (b). The Committee expects the DOT to request specifically comment in this rulemaking as to whether the equipment requirements currently specified by the Commercial Vehicle Safety Alliance constitute an appropriate substitute for part 393 and an appropriate set of equipment inspection requirements.

Section 12(d) specifies that the periodic inspection established pursuant to subsection (b) is to be recognized as adequate in every State for the period of such inspection. Such reciprocity is crucial, in the Committee's view, toward promoting uniformity in inspection in furtherance of safety. This does not, however, prohibit a State from making random inspections of commercial motor vehicles.

Section 13—Certification of safety fitness

Section 13(a) requires the DOT, in cooperation with the ICC, to establish safety fitness standards applicable to commercial motor vehicles—both to carriers regulated by the ICC and those which are exempt and incuding persons seeking new or additional motor carrier operating authority. The safety fitness procedure shall include: specific initial and continuing requirements to prove safety fitness; a means of determining whether carriers meet these safety fitness requirements; and specific time deadlines for action by DOT and the ICC in making safety fitness determinations.

The Committee notes that the initial safety fitness requirements pertain to new carriers seeking common or contract carrier authority, existing carriers seeking an expansion of their common or contract authority, and private carriers seeking for-hire authority. All such carriers must meet the fitness test before being allowed to obtain operating authority, and of course are subject to the continuing safety fitness requirement.

Subsection (b) requires the Secretary of Transportation to submit a copy of this safety fitness procedure to Congress within 1 year of the date of enactment.

Subsection (c) provides that this safety fitness procedure shall supersede all previous rules regarding DOT safety fitness assessments and ratings of motor carriers.

Subsection (d) prohibits the ICC from granting motor common or contract carrier operating authority to an applicant that does not meet the safety fitness requirements established pursuant to this section. The Committee does not intend this strengthened safety fitness requirement to be burdensome or to act as a barrier to entry into the motor carrier industry. Rather, the Committee seeks to ensure that all motor carriers operating on the highways are truly safe. This

is of particular concern with regard to first-time applicants for truck and bus operating authority. With the eased economic entry requirements pursuant to regulatory changes embodied in the Motor Carrier Act of 1980 and the Bus Regulatory Reform act of 1982, the safety fitness of applicants, as well as existing carriers, assumes increasing importance. The Committee has been concerned about recent cases where operating authority was granted by the ICC to carriers with clear safety problems.

The Committee expects that DOT and the ICC will develop and implement the new safety fitness procedure within current budgetary and personnel ceilings.

Section 14—Heavy Truck Research

Section 314(a) requires the National Highway Traffic Safety Administration (NHTSA) at DOT to undertake research into the safety characteristics of heavy trucks, the unique problems associated with heavy trucks, and the manner in which such trucks are driven. The comprehensive study required under this section is to include an examination of the handling, braking, stability and crashworthiness of heavy trucks, as well as the programs and needs of enforcement agencies to assure compliance with traffic laws by commercial motor vehicle drivers.

In 1982, Congress authorized uniform truck size dimensions to increase productivity and efficiency in the trucking industry, which is resulting in larger trucks being allowed throughout the United States. The Committee is continuing to monitor closely the safety of all trucks and is aware that large trucks (10,000 pounds and greater) have been found to be involved disproportionately in fatalities.

According to the Insurance Institute for Highway Safety, in 1978 (the most recent year for which a detailed analysis of truck crashes was made), large trucks were involved in 432,000 crashes, about 6 percent of the national crash total. However, they contributed to 12 percent of the national total of fatal crashes, largely due to the difference in weight between trucks and other involved vehicles. This problem is further compounded by the fact that there is no meaningful Federal regulation to prescribe maximum stopping distances for large trucks.

The Committee intends that the DOT thoroughly examine all safety aspects of heavy trucks, including the need for amended Federal standards. The Committee also intends that inclusion in this study of programs and needs of enforcement agencies to assure compliance with traffic laws by commercial motor vehicle drivers in no way diminishes DOT's investigation of the safety characteristics of and problems associated with heavy trucks.

Section 14(b) authorizes appropriation of such sums as may be necessary for fiscal years 1985 and 1986 to conduct the research required under subsection (a). The Committee envisions funding levels of at least $1,200,000 for fiscal 1985 and $1,400,000 for fiscal 1986 as being necessary to successfully and thoroughly conduct this research.

Section 15—Truck occupant protection

This section directs the DOT to undertake a study of crash protection for truck occupants. The study is to investigate potential and

known hazards to truck occupants and means of improving truck occupant safety, and evaluate potential performance standards to be met by manufacturers. This study is to be submitted to Congress within 1 year of the date of enactment. This section authorizes appropriations of such sums as are necessary in fiscal 1985 and 1986 to undertake this study.

Little attention has been given by the Government to truck occupant protection. For example:

(1) The NHTSA at the DOT is the only agency with authority to set occupant protection standards for trucks. The few existing standards for heavy trucks were established years after comparable standards were set for passenger cars. Many occupant protection standards that were set 10 to 15 years ago for passenger cars have never been established for trucks. For instance, crashworthiness standards for heavy trucks have not been established to give drivers adequate protection.

(2) The design of the truck steering wheel has been neglected, even though abdominal injuries repeatedly have been shown to be especially common in injured truck drivers.

(3) Changing the design of products (for example, multipiece truck wheels which often explode) could substantially reduce the risk of injury for workers.

(4) Despite the fact that seatbelts, when used, substantially reduce deaths and severe injuries to automobile occupants, OSHA has not promulgated regulations to require their use in company-owned cars. Further, most employers (including the Government) either do not require or do not enforce seatbelt use.

Truck occupant protection is a major safety and occupational health problem. Occupational injuries in the United States result in an estimated 13,000 deaths, 245 million lost work days, and $25 billion in direct and indirect costs each year. Motor vehicle crashes are the leading cause of fatal injuries in the workplace. This is an especially important concern in the trucking industry which employs roughly 2 million drivers in the United Staes. According to NHTSA figures, in 1981, 1,131 occupants of heavy trucks died in the United States.

According to March 1983 testimony presented by the International Brotherhood of Teamsters before the Subcommittee on Surface Transportation, truck drivers sustained 9.9 percent of all work-related fatalities, yet comprise only 2.7 percent of the employed workforce, according to 1979 Department of Labor statistics. According to March 1983 testimony presented by Johns Hopkins University before the Subcommittee on Surface Transportation, the death rate of truck drivers is much higher than that of the average worker. For example, in Wisconsin, a truck driver has approximately 9 times as great a chance of being killed on the job as the average worker, while in Maryland, 1 out of every 10 workers killed is a truck driver.

Section 15 requires NHTSA to investigate hazards to truck occupants. The Committee expects NHTSA to consider at least the following: the need for truck cabs that do not collapse easily in a crash and that make it possible to remove injured occupants easily; the need for steering wheels that do not focus crash forces on a small area of the abdomen; glass retention; passive and active occupant restraints; and cab size/driver accommodation.

Section 16—Study of safety related devices

This section requires the Secretary of Transportation to undertake a study of the safety improvement potential of devices such as flare kits and distress signaling systems. These devices would be carried in all motor vehicles. This study is to be submitted to Congress within 6 months of the date of enactment. This section authorizes appropriation of such sums as are necessary in fiscal years 1985 and 1986 to undertake this study.

Prior to 1973, DOT regulations provided buses, trucks, truck-tractors, and other motor driven vehicles with a choice of type of emergency warning device, or a combination thereof. In October 1979, a Notice of Proposed Rulemaking was issued by the Bureau of Motor Carrier Safety which was designed to make regulations consistent with Federal Motor Vehicle Safety Standard 125. The new regulations provided that a vehicle must carry a reflective triangle and could also carry fuses (flares), red electric lanterns and liquid burning pot flares.

At that time, there was a movement to make traffic signs and signals conform to an international pattern. In some foreign countries the signal for a stopped vehicle in an emergency situation was a reflective triangle. In the rulemaking proceeding, therefore, it was generally accepted that reflective triangles and fuses would be the authorized emergency warning devices. Other types of warning devices would be "phased out." Ultimately, the reflective triangle was designated as the only required emergency warning device, despite recognition by the vast majority of the parties participating in the proceeding that flares provide greater warning capability than reflective triangles.

Another concern is distress signalling for stranded automobile occupants. When a car becomes disabled, this presents a risk to that vehicle's occupants as well as to the drivers sharing the highway with the disabled motorist. Poor visibility of disabled vehicles of all types can present significant safety problems.

Section 16 requires DOT to conduct a study of the effectiveness of existing regulations regarding emergency warning devices required to be carried on buses, trucks, truck-tractors, and motor-driven vehicles which are involved in emergency situations. The study shall also investigate the potential costs and benefits of requiring passenger automobile operators to carry emergency warning devices, and shall examine the relative benefits of various types of warning devices in enhancing highway safety.

The Committee intends that DOT's report to the Congress fairly evaluate and determine the safest emergency warning device to be used by regulated vehicles and determine whether passenger automobiles should be required to carry any type of distress signaling system.

Section 17.—Oversight

This section requires annual Congressional oversight hearings for three years on the effects of this title and to ensure that it is being implemented according to Congressional intent and the purposes of this title.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new material is printed in italic, existing law in which no change is proposed is shown in roman):

TITLE 49, UNITED STATES CODE

Section 507 of that title

§ 507. Enforcement

(a)–(b) * * *

(c) *The Attorney General, at the request of the Secretary, may bring an action in an appropriate district court of the United States for equitable relief to redress a violation by any person of a provision of section 3102 of this title or the Motor Carrier Safety Act of 1984, or an order or regulation issued under such section or Act. Such district court shall have jurisdiction to determine any such action and may grant such relief as is necessary or appropriate, including mandatory or prohibitive injunctive relief, interim equitable relief, and punitive damages.*

[(c)] (*d*) A person injured because a rail carrier or freight forwarder does not obey an order of the Secretary under this chapter may bring a civil action to enforce that order under this subsection.

[(d)] (*e*) In a civil action brought under subsection (a)(2) of this section against a motor carrier, motor carrier of migrant workers, or motor private carrier—

(1) trial is in the judicial district in which the carrier operates;

(2) process may be served without regard to the territorial limits of the district or of the State in which the action is brought; and

(3) a person participating with the carrier in a violation may be joined in the civil action without regard to the residence of the person.

Section 521 of that title

§ 521. Civil penalties

(a) * * * *

[(b)(1) A person required to make a report to the Secretary, answer a question, or make, prepare, or preserve a record under this chapter about transportation by motor carrier, or an officer, agent, or employee of that person, that (A) does not make the report, (B) does not specifically, completely, and truthfully answer the question, or (C) does not make, prepare, or preserve the record in the form and manner prescribed by the Secretary, is liable to the Government for a civil penalty of not more than $500 for each violation and for not more than $250 for each additional day the violation continues.

[(2) Trial in a civil action under this subsection is in the judicial district in which (A) the motor carrier has its principal office, (B) the motor carrer was authorized to provide transportation under subtitle

IV of this title when the violation occurred, (C) the violation occurred, or (D) the offender is found. Process in the action may be served in the judicial district of which the offender is an inhabitant or in which the offender may be found.]

(b) (1) If the Secretary finds that a violation of section 3102 of this title or the Motor Carrier Safety Act of 1984, or a violation of a regulation issued under such section or such Act, has occurred, the Secretary shall issue a written notice to the violator. Such notice shall describe with reasonable particularity the nature of the violation found and the provision which has been violated. The notice shall fix a reasonable time for abatement of the violation, specify the proposed civil penalty, if any, and suggest actions which might be taken in order to abate the violation. The notice shall indicate that the violator may, within 15 days of service, notify the Secretary of the violator's intention to contest the matter. In the event of a contested notice, the Secretary shall afford such violator an opportunity for a hearinfi, pursuant to section 554 of title 5, following which the Secretary shall issue an order affirming, modifying, or vacating the notice of violation.

(2) Except as otherwise provided in this subsection, any person who is determined by the Secretary, after notice and opportunity for a hearing, to have committed an act which is a violation of recordkeeping requirements issued by the Secretary pursuant to section 3102 of this title or the Motor Carrier Safety Act of 1984 shall be liable to the United States for a civil penalty not to exceed $500 for each offense. Each day of a violation shall constitute a separate offense, except that the total of all civil penalties assessed against any violator shall not exceed $2,500. If the Secretary determines that a serious pattern of safety violations, other than recordkeeping requirements, exists or has occurred, the Secretary may assess a civil penalty not to exceed $1,000 for each offense: Provided, however. That the maximum fine for each such pattern of safety violations shall not exceed $10,000. If the Secretary determines that a substantial health or safety violation exists or has occurred which could reasonably lead to, or has resulted in, serious personal injury or death, the Secretary may assess a civil penalty not to exceed $10,000 for each offense: Provided, however, That, except for recordkeeping violations, no civil penalty provided under this section shall be assessed against an employee for a violation of this section unless the Secretary determines that such employee's actions constituted gross negligence or reckless disregard for safety, in which case such employee shall be liable for a civil penalty not to exceed $1,000. The amount of any civil penalty, and a reasonable time for abatement of the violation, shall by written order be determined by the Secretary, taking into account the nature, circumstances, extent, and gravity of the violation committed and, with respect to the violation, the degree of culpability, history of prior offenses, ability to pay, effect on ability to continue to do business, and such other matters as justice and public safety may require. In each case, the assessment shall be calculated to induce further compliance.

(3) The Secretary may require any violator served with a notice of violation to post a copy of such notice or statement of such notice in

such place or places and for such duration as the Secretary may determine appropriate to aid in the enforcement of section 3102 of this title or the Motor Carrier Safety Act of 1984.

(4) Such civil penalty may be recovered in an action brought by the Attorney General on behalf of the United States in the appropriate district court of the United States or, before referral to the Attorney General, such civil penalty may be compromised by the Secretary.

(5)(A) If, upon inspection or investigation, the Secretary determines that a violation, or combination of violations, poses an imminent hazard to safety, the Secretary shall order a vehicle or employee operating such vehicle out of service, or order an employer to cease all or part of the employer's commercial motor vehicle operations. In making any such order, the Secretary shall impose no restriction on any employee or employer beyond that required to abate the hazard. Subsequent to the issuance of the order, opportunity for review shall be provided in accordance with section 554 of title 5, except that such review shall occur not later than 10 days after issuance of such order.

(B) In this paragraph, "imminent hazard" means any condition of vehicle, employee, or commercial motor vehicle operations which is likely to result in serious injury or death if not discontinued immediately.

(6) Any person who knowingly and willfully violates any provision of section 3102 of this title or the Motor Carrier Safety Act of 1984, or a regulation issued under this title or such Act, shall, upon conviction, be subject for each offense for a fine not to exceed $25,000 or imprisonment for a term not to exceed 1 year, or both, except that, if such violator is an employee, the violator shall only be subject to penalty if, while operating a commercial motor vehicle, the violator's activities have led or could have led to death or serious injury, in which case the violator shall be liable, upon conviction, for a fine not to exceed $2,500.

(7) The Secretary shall promulgate regulations establishing penalty schedules designed to induce timely compliance for persons failing to comply promptly with the requirements set forth in any notices and orders under this subsection.

(8) Any aggrieved person who, after a hearing, is adversely affected by a final order issued under this section may, within 30 days, petition for review of the order in the United States court of appeals in the circuit wherein the violation is alleged to have occurred or where the violator has his principal place of business or residence, or in the United States Court of Appeals for the District of Columbia Circuit. Review of the order shall be based on a determination of whether the Secretary's findings and conclusions were supported by substantial evidence, or were otherwise not in accordance with law. No objection that has not been urged before the Secretary shall be considered by the court, unless reasonable grounds existed for failure or neglect to do so. The commencement of proceedings under this subsection shall not, unless ordered by the court, operate as a stay of the order of the Secretary.

(9) All penalties and fines collected under this section shall be deposited into the Highway Trust Fund.

(10) In any action brought under this section, process may be served without regard to the territorial limits of the district of the State in which the action is brought.

(11) In any proceeding for criminal contempt for violation of an injunction or restraining order issued under this section, trial shall be by the court, or, upon demand of the accused, by a jury, conducted in accordance with the provisions of rule 42(b) of the Federal Rules of Criminal Procedure.

(12) As used in this subsection, the term—

(A) "commerce" means trade, traffic, or transportation within the jurisdiction of the United States between a place in a State and a place outside of such State, or which affects trade, traffic, or transportation between a place in a State and a place outside of such State;

(B) "commercial motor vehicle" means any self-propelled or towed vehicle used on the highways in commerce principally to transport passengers or cargo—

(i) of such vehicle has a gross vehicle weight rating of 10,000 or more pounds;

(ii) if such vehicle is designed to transport more than 15 passengers, including the driver, except for a schoolbus, as defined in section 102(14) of the National Traffic and Motor Vehicle Safety Act of 1966 (15 U.S.C. 1391(14)), when used in transporting primary, pre-primary, or secondary school students to or from such schools or events related to such schools; or

(iii) if such vehicle is used in the transportation of materials found by the Secretary to be hazardous for the purposes of the Hazardous Materials Transportation Act (49 U.S.C. 1801 et seq.);

(C) "employee" means—

(i) a driver of a commercial motor vehicle (including, for purposes of this subsection only, an independent contractor while in the course of personally operating a commercial motor vehicle);

(ii) a mechanic;

(iii) a freight handler; or

(iv) any individual other than an employer; who is employed by a commercial motor carrier and who in the course of this employment directly affects commercial motor vehicle safety, but such term does not include an employee of the United States or any State who is acting within the course of such employment;

(D) "employer" means any person engaged in a business affecting commerce who owns or leases a commercial motor vehicle in connection with that business, or assigns employees to operate it in commerce, but such term does not include the United States or any State;

(E) "person" means one or more individuals, partnerships, associations, corporations, business trusts, or any other organized group of individuals; and

(F) "State" means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, Guam, or the Commonwealth of the Northern Marianas, or a political subdivision thereof.

Section 2313 of that title

§ 2313. Enforcement

[The Secretary, or, on] *On* the request of the Secretary, the Attorney General of the United States, is authorized and directed to institute any civil action for injunctive relief as may be appropriate to assure compliance with the provisions of this title. Such action may be instituted in any district court of the United States in any State where such relief is required to assure compliance with the terms of this title. In any action under this section, the court shall, upon a proper showing, issue a temporary restraining order or preliminary or permanent injunction. In any such action, the court may also issue a mandatory injunction commanding any State or person to comply with any applicable provision of this title, or any rule issued under authority of this title.

Section 3102 of that title

§ 3012. Requirements for qualifications, hours of service, safety, and equipment standards

(a)–(c) * * *

(d) The Secretary shall, before prescribing or revising any requirement under this section, consid r the costs and benefits of such requirement.

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